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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------------------------------------------------|-------------|----------------------|------------------------------|------------------|
| 10/689,471 | 10/20/2003 | Tongbi Jiang | MCT.0015C2US (97-0524.04) | 4162 |
| 7590 04/22/2005 | | | EXAMINER | |
| Trop, Pruner & Hu, P.C. Suite 100 8554 Katy Freeway Houston, TX 77024 | | | TRINH, MINH N | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3729 | |

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/689,471 | | JIANG ET AL. | |
| | Examiner | | Art Unit | |
| | Minh Trinh | | 3729 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of the "conditional" request for RCE application is acceptable and a RCE has been established. An action on the RCE follows.
2. The specification is objected to because of the following: it is not clear whether the "bridging elements" 14 is the same as the "spokes" as described in details in claims 34-38. Please clarify. Further, applicant is required to make sure that the claim languages is to be consistent with the language of specification. Correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 34, 37 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (5,872,399)

Lee discloses a method of making a stencil or solder mask comprising: forming a plurality of segmental annular openings in a stencil plate 200 to define a central portion of the plate, a plurality of spokes 100, and a remainder of the stencil plate, said spokes 100 connecting the central portion to the remainder of the plate between adjacent segmental annular openings 160 (see Fig. 6A, and related embodiment of 4A, each shows spokes connectively attached to central portion and the remainder of the stencil

200. Further, it is noted that references 100's of Lee reference read on the broadly claimed "spokes" of the present application.

Limitations of claims 37-38 are also met by Lee (refer Fig. 6A).

5. Claims 34, 37 and 38 are also rejected under 35 U.S.C. 102(b) as being anticipated by Natarajan et al (US 5,519,580)

Natarajan et al disclose a method of making a stencil or solder mask comprising: forming a plurality of segmental annular openings in a stencil plate to define a central portion of the plate, a plurality of spokes, and a remainder of the stencil plate, said spokes connecting the central portion to the remainder of the plate between adjacent segmental annular openings (see Fig. 4). It is noted that Fig. 4 of Natarajan et al depicts stencil or mask 32 having tabs or spokes 26 connectively attached to central 28 and the remainder of the stencil plate 32.

Limitations of claims 37-38 are also met by Natarajan et al (see Fig. 4).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Natarajan et al or Lee.

As applied to claims 35-36, regarding the size and thickness configuration requirements. It would have been an obvious matter of design choice to choose any desired size, shape and thickness configurations as described above, since applicant has not disclosed that the features are critical features, and patentably distinguishing features and it appears that the invention would perform equally well with the size, shape and thickness configurations as shown in the prior art reference (see Figs. 2-4 of Natarajan et al). Furthermore, it would have been an obvious matter of design choice to change in the size of a associated opening of a work piece, since such a modification would have involved a mere change in the size of a work piece. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Limitation of claim 36 is also met as set forth above.

Prior Art References

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art references are cited for their teaching of method of making a stencil or mask for solder paste.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (703) 305-2887. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

Art Unit: 3729

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mt



Minh Trinh 4/4/05

Primary Examiner Group 3729